Reference 11

TEXAS AIR CV TROL BOARD LABOA ORY 6330 Highway 290 East Austin; Texas 78723

ACL Number: 4344

Status: complete

Priority: standard

Property Sampled: Falcon Refining Co.

Address: FM 2725 & Bishop Road

City: Ingleside

County: San Patricio

Region: 5

Sampled by: Tom Palmer

Date Sampled: 1/13/86

Adjacent Sources: sample of wastewater from refinery

Number of samples: 1 Number of reference samples or blanks: 0

Analysis Requested: ID of odorous compounds

Number of samples received: 1

Date Received: 1/15/86

Number of reference samples or blanks received: 0

Condition: OK

Assigned to: Jim Lindgren

Assigned by: David Lucas

Analysis to be performed: screen for odorous compounds

ATTACHMENT

If transferred between sections, Date Transferred: n/a

By:

¡To:

Date Analysis Completed: 2/21/86 Analysis Performed by: Mark Leidig,

Date Reported: 3/3/86

Approved by: J. Maxine Jenks

Description of Samples:

The sample was taken from a wastewater storage tank at Falcon Refining. Falcon recently refined a quantity of crude stock which resulted in a number of odor complaints. The water separated during refining contains the same odorous compound(s) and is also the subject of complaints.

RECEIVED

MAR & 1956

REGION 5
AIR POLLUTION CONTROL

Why were the samples taken? What do you hope to learn?:

If possible to identify the odorous constituents, evaluate possible health effects from exposure, and possibly arrive at neutralization or removal method.

How will the analytical results be used? What action is dependent on these results?:

NOV's have been issued for nuisance odor. Depending on content of material, may issue NOV for permit conditions violation. Also want to answer complainant's questions on health effects.

Procedure:

The sample can was opened and a 300-microliter headspace sample was injected into the GC/MS. This procedure was repeated. A 20-mL portion of the water was them shallown im a separatory funnel with 10 mL of methylene chloride to partition the organic components. The methylene chloride layer was removed to a serum vial, and a n-microliter aliquot was injected into the GC/MS.

Results:

The headspace samples showed the presence of xylene. The methylene chloride extract showed butanol, cyclohexanediol, and 1 phenylethanol.

Present in the fürst meanspace sample was N, N-diphenylamine. This compound was mot found in subsequent injections, possibly due to its escape into the atmosphere upon fürst opening the sealed container.

ATTACHMENT

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